

REMARKS/ARGUMENTS

Reconsideration and withdrawal of the rejections of the application are respectfully requested in view of the amendments and remarks herewith, which place the application into condition for allowance. The present amendment is being made to facilitate prosecution of the application.

I. STATUS OF THE CLAIMS AND FORMAL MATTERS

Claims 1-14 are currently pending. Claims 1, 4-6, and 10-13 are independent and are hereby amended. No new matter has been introduced. Support for this amendment is provided throughout the Specification as originally filed.

Changes to the claims are not made for the purpose of patentability within the meaning of 35 U.S.C. §101, §102, §103, or §112. Rather, these changes are made simply for clarification and to round out the scope of protection to which Applicants are entitled.

II. REJECTIONS UNDER 35 U.S.C. §103

Claims 1, 4, 5 and 12-14 were rejected under 35 U.S.C. §103(a) as allegedly unpatentable over U.S. Patent No. U.S. Patent No. 6,593,969 to Driscoll et al. (“Driscoll”) in view of U.S. Patent No. 6,476,869 to Sekine et al. (“Sekine”);

Claims 2, 6-8, 10-11 were rejected under 35 U.S.C. §103(a) as allegedly unpatentable over Driscoll in view of Sekne and further in view of U.S. Patent No. 5,652,621 to Adams, Jr. et al. (“Adams’’); and

Claims 3 and 9 were rejected under 35 U.S.C. §103(a) as allegedly unpatentable over U.S. Patent No. U.S. Patent No. 6,593,969 to Driscoll in view of Sekine and Adams and further in view of U.S. Patent No. 5,835,138 to Kondo.

In view of the amendments herein, Applicants respectfully traverse these rejections.

Independent claim 1, as amended, is representative and recites, *inter alia*:

“picture image conversion means for both eliminating distortion of the selected entirety or the portion of the picture image and for converting the selected entirety or portion into high quality picture image with increased resolution in a single step,

... wherein the high quality picture has a higher quality than the selected entirety or the portion of the picture image whose distortion has been eliminated, and

... wherein the single step operates on only the distorted image to both eliminate distortion and convert into a higher quality image with increased resolution.” (emphasis added).

Applicants re-assert the arguments presented in response to the Office Action of September 21, 2005, December 28, 2005 and March 6, 2006.

As understood by Applicants, and as pointed out in the Office Action, Sekine discloses an image capture and processing system that produces a higher-quality picture as a result of correcting aberration of the photo-taking lens. The Office Action asserts this is the higher-quality image. That is, the Sekine device operates on an image in a second step after distortion has been eliminated. Also, the Sekine device purports to provide a higher-quality image by correction of the photo-taking lens aberrations.

In contrast, the present invention recites, “picture image conversion means for both eliminating distortion of the selected entirety or the portion of the picture image and for converting the selected entirety or portion into high quality picture image with increased resolution in a single step . . . wherein the high quality picture has a higher quality than the selected entirety or the portion of the picture image whose distortion has been eliminated, and

... wherein the single step operates on only the distorted image to both eliminate distortion and convert into a higher quality image with increased resolution." The present application is distinguishable from Sekine for at least two reasons.

First, in the present application, a single step operates on the distorted image to both eliminate distortion and provide a higher quality image. Based on the single step (*e.g.*, classification adaptive processing) distortion-free and higher quality image is calculated from the stored distorted image. That is, there are not two steps: first eliminating the distortion (such as due from the conical mirror example in the specification), and second, operating on the undistorted image to provide a higher quality image.

Second, the present application provides a higher quality image by increasing the resolution of the picture image (at the same time as eliminating the distortion). This is distinguishable from Sekine where the higher quality image is the result of correcting for photo-lens aberrations. Indeed, in the present application the higher quality image is achieved by improving the pixels in the image. Page 35, line 13 to page 36, line 2 and FIG. 14.

Thus, the present device can obtain a higher-quality picture than the picture whose distortion at the time the image was made has been eliminated. That is, the image of the present invention is better than an image from which only distortion has been eliminated.

The Office Action asserts combining Driscoll with Sekine to eliminate distortion and increase quality, respectively. However, it is not obvious how to achieve both purposes in a single step as claimed in the present application. The two purposes each require movement of pixels and are not mutually exclusive. That is, to achieve both purposes in a single step requires a combination pixel movements. The present application describes the operation of the picture

image conversion means in the specification at, for example, page 26, line 9 to page 27, line 18, to achieve both purposes in the same step.

Claim 1 is not obvious over Driscoll and Sekine because those references taken alone or in combination do not teach or suggest each and every limitation recited in the claim. In particular the cited references do not teach or suggest, “picture image conversion means for both eliminating distortion of the selected entirety or the portion of the picture image and for converting the selected entirety or portion into high quality picture image with increased resolution in a single step . . . wherein the high quality picture has a higher quality than the selected entirety or the portion of the picture image whose distortion has been eliminated, and . . . wherein the single step operates on only the distorted image to both eliminate distortion and convert into a higher quality image with increased resolution.” as recited in claim 1.

For reasons similar to those described above, independent claims 4-6 and 10-13 are also believed to be patentable.

Applicants respectfully submit that neither Kondo nor Adams provide support for the elements missing in Driscoll and Sekine as discussed above.

III. DEPENDENT CLAIMS

The other claims are dependent from one of the claims discussed above and are therefore believed patentable for at least the same reasons. Because each dependent claim is also deemed

to define an additional aspect of the invention, however, the individual reconsideration of the patentability of each on its own merits is respectfully requested.

CONCLUSION

Claims 1-14 are in condition for allowance. In the event the Examiner disagrees with any of statements appearing above with respect to the disclosure in the cited reference, or references, it is respectfully requested that the Examiner specifically indicate those portions of the reference, or references, providing the basis for a contrary view.

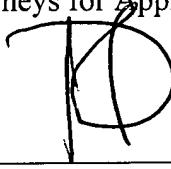
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In view of the foregoing amendments and remarks, it is believed that all of the claims in this application are patentable and Applicants respectfully request early passage to issue of the present application.

Respectfully submitted,

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